DOCKET: CU-4203

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Chris TSALAKOPOULOS

TITLE:

AN APPARATUS AND METHOD FOR DETERMINING A LEVEL OF CONFIDENCE IN A RISK ASSESSMENT AND/OR DETERMINING A

LEVEL OF ACCPETABILITY OF AN EVENT OCCURING

## **AMENDED CLAIMS**

1-45. (cancelled)

46. (new) An apparatus for assisting a user in determining a level of confidence in a risk assessment, the apparatus comprising:

input means for receiving at least one of a set of factors each of which can affect the level of confidence in the risk assessment;

storage means for storing the set of factors and a set of weighting indicators, wherein each factor within the set of factors is associated with a weighting indicator from the set of weighting indicators;

processing means for processing the at least one of the set of factors entered into the input means and processing the set of factors stored in the storage means in order to identify a factor in the set of factors which corresponds to the at least one factor entered into the input means; and

output means for outputting the set of weighting indicators and the weighting indicator associated with the factor identified by the processing means.

47. (new) The apparatus as claimed in claim 46, wherein the set of factors comprises: information about a technique used to obtain the risk assessment; information about a technique used to perform the risk assessment;

an extent to which the technique is used to obtain the risk assessment; a level of acceptance of the technique and the extent to which the technique is used to obtain the risk assessment; and information about the environment of the risk assessment.

- 48. (new) The apparatus as claimed in claim 47, wherein the set of weighting indicators and the set of factors are arranged as a matrix, wherein the set of weighting indicators are entries in the matrix and the set of factors provide an index to the entries.
- 49. (new) The apparatus as claimed in claim 48, wherein each of the set of factors providing the index to the entries in the matrix are divided into sub-factors.
- 50. (new) The apparatus as claimed in claim 49, wherein the set of factors providing the index to the entries in the matrix comprise:

the information about the environment of the risk assessment; information about the technique used to obtain the risk assessment;

information about an extent to which the technique is used to obtain the risk assessment;

information about a level of acceptance of the extent to which the technique is used to obtain the risk assessment.

- 51. (new) The apparatus as claimed in claim 50, wherein the sub-factors for the environment of the risk assessment comprise: simple; low; moderate; high moderate; and complex.
- 52. (new) The apparatus as claimed in claim 51, wherein the sub-factors for the extent to which the technique is used comprises: basic; moderate; and extensive.
- 53. (new) The apparatus as claimed in claim 52, wherein the input means allows the user to enter and/or change the set of factors and the set of weighting indicators.
- 54. (new) The apparatus as claimed in claim 53, wherein the input means is capable of storing in the storage means the set of factors and the set of weighting indicators entered into the input means.

- 55. (new) The apparatus as claimed in claim 54, wherein the input means comprises a graphical user interface.
- 56. (new) The apparatus as claimed in claim 55, wherein the storage means comprises a computer storage medium.
- 57. (new) The apparatus as claimed in claim 56, wherein the computer storage medium comprises a database.
- 58. (new) The apparatus as claimed in claim 57, wherein the processing means comprises a suitably configured computer.
- 59. (new) The apparatus as claimed in claim 58, wherein the output means comprises a graphical user interface.
- 60 (new) A method for assisting a user in determining a level of confidence in a risk assessment, the method comprising the steps of:

entering into an input means at least one of a set of factors each of which can affect the level of confidence in the risk assessment;

storing in a storage medium the set of factors and a set of weighting indicators, wherein each factor within the set of factors is associated with a weighting indicator from the set of weighting indicators;

processing the at least one of the set of factors entered into the input means and processing the set of factors stored in the storage means in order to identify a factor in the set of factors which corresponds to the at least one factor entered into the input means; and

outputting the set of weighting indicators and the weighting indicator associated with the factor identified by the processing step.

- 61. (new) The method as claimed in claim 60, further comprising the step of arranging the set of factors as a matrix, wherein the set of weighting indicators are entries in the matrix and the set of factors provide an index to the entries.
- 62. (new) The method as claimed in claim 61, further comprising the step of entering and/or changing the set of factors and the set of weighting indicators entered into the input means.
- 63. (new) An apparatus for assisting a user in determining a level of acceptability of an event occurring, the apparatus comprising:

input means for receiving a likelihood value which represents a likelihood that the event will occur, and a confidence value which represents a level of confidence that the user has in the likelihood value;

storage means for storing a plurality of records each of which includes an indicator representing a level of acceptability of the event occurring, a range of likelihood values, and a range of confidence values;

identify means for identifying one of the records in the storage means, the one of the records being identified by processing the likelihood value and the confidence value received by the input means, and each of the records stored in the storage means; and

output means for outputting the indicator of the one of the records identified by the identifying means.

64. (new) The apparatus as claimed in claim 63, wherein the range of confidence values of the record identified by the identify means comprises the confidence value received by the input means, and the range of likelihood values of the record identified by the identify means either includes the likelihood value received by the input means or is numerically closer to the likelihood value received by the input means than the range of likelihood values of any other of the records for which the range of confidence values include the confidence value received by the input means.

- 65. (new) The apparatus as claimed in claim 64, wherein the indicator in each of the records is a visual indicator each being a different colour or symbol.
- 66. (new) The apparatus as claimed in claim 65, wherein the range of likelihood values in each of the records comprises a range of probability values.
- 67. (new) The apparatus as claimed in claim 66, wherein the range of confidence values in each of the records comprises a range of integers.
- 68. (new) The apparatus as claimed in claim 67, wherein the input means is configured to allow the user to enter and/or change the range of likelihood values and/or range of confidence values in each of the records.
- 69. (new) The apparatus as claimed in claim 68, wherein the input means comprises a graphical user interface.
- 70. (new) The apparatus as claimed in claim 69, wherein the storage means comprises a computer storage medium.
- 71. (new) The apparatus as claimed in claim 70, wherein the computer storage medium comprises a database.
- 72. (new) The apparatus as claimed in claim 71, wherein the identify means comprises a suitably configured computer.
- 73. (new) The apparatus as claimed in claim 72, wherein the output means comprises a graphical user interface.
- 74. (new) A method for assisting a user in determining a level of acceptability of an event occurring, the method comprising the steps of:

receiving a likelihood value which represents a likelihood that the event will occur, and a confidence value which represents a level of confidence that the user has in the likelihood value;

storing a plurality of records each of which includes an indicator representing a level of acceptability of the event occurring, a range of likelihood values, and a range of confidence values:

identifying one of the records stored by the storing step, the one of the records being identified by processing the likelihood value and the confidence value received by the receiving step, and each of the records stored by the storing step; and

outputting the indicator of the one of the records identified by the identifying step.

75. (new) The method as claimed in claim 74, wherein the range of confidence values of the record identified by the identifying step comprises the confidence value received by the receiving step, and the range of likelihood values of the record identified by the identifying step either includes the likelihood value received by the input means or is numerically closer to the likelihood value received by the receiving step than the range of likelihood values of any other of the records for which the range of confidence values include the confidence value received by the input means.

76. (new) The method as claimed in claim 75, further comprising the step of entering and/or changing the range of likelihood values and/or range of confidence values in each of the records.

77. (new) An apparatus for determining a level of confidence in a risk assessment, the apparatus comprising:

obtaining means operable to obtain a weighting that is associated with at least one of a plurality of factors that can influence a reliability of the risk assessment; and

comparing means operable to compare the weighting to a range of weightings which are associated with the factors in order to determine the level of confidence in the risk assessment.

- 78. (new) The apparatus as claimed in claim 77, wherein the obtaining means is such that it uses the at least one of the factors to retrieve the weighting from a record of the weightings.
- 79. (new) The apparatus as claimed in claim 78, wherein the obtaining means is operable to retrieve the weighting from the record by using a first index and a second index to retrieve the weighting from the record, wherein the first index corresponds to a first of the at least one of the factors, and the second index corresponds to a second and a third of the at least one of the factors.
- 80. (new) The apparatus as claimed in claim 79, wherein the first of the at least one of the factors relates to an environmental parameter associated with the risk assessment, the second of the at least one of the factors relates to an amount of work performed to determine the risk assessment, and the third of the at least one of the factors relates to a level of acceptance associated with the amount of work performed and a technique used to perform the work.
- 81. (new) The apparatus as claimed in claim 80, wherein the record comprises a matrix that contains an entry for each of the weightings, and the first index and the second index correspond to an x, y coordinate for the entry.
- 82. (new) A method of determining a level of confidence in a risk assessment, the method comprising the steps of:

obtaining a weighting that is associated with at least one of a plurality of factors that can influence a reliability of the risk assessment; and

comparing the weighting to a range of weightings which are associated with the factors in order to determine the level of confidence in the risk assessment.

83. (new) The method as claimed in claim 82, wherein the step of obtaining the weighting comprises using the at least one of the factors to retrieve the weighting from a record of the weightings.

84. (new) The method as claimed in claim 83, wherein the step of using the at least one of the factors to retrieve the weighting comprises the step of using a first index and a second index to retrieve the weighting from the record, wherein the first index corresponds to a first of the at least one of the factors, and the second index corresponds to a second and a third of the at least one of the factors.

85. (new) The method as claimed in claim 84, wherein the first of the at least one of the factors relates to an environmental parameter associated with the risk assessment, the second of the at least one of the factors relates to an amount of work performed to determine the risk assessment, and the third of the at least one of the factors relates to a level of acceptance associated with the amount of work performed and a technique used to perform the work.

86. (new) The method as claimed in claim 85, wherein the record comprises a matrix that contains an entry for each of the weightings, and the first index and the second index correspond to an x, y coordinate for the entry.